

The Optimum Temperature for the Regenerative Reheating of Feed  
Water for an Entire Power Station

96-3-16/26

ASSOCIATION: Moscow Power Institute (Moskovskiy Energeticheskiy Institut).

AVAILABLE: Library of Congress.

Card 3/3

S/112/59/000/012/022/097  
A052/A001

Translation from: Referativnyy zhurnal, Elektrotehnika, 1959, No. 12, p. 23.  
# 24078

AUTHOR: Kalafati, D.D.

TITLE: An Analysis of the Optimum Temperature of Heat Supply in Steam  
Turbine Cycles of Nuclear Power Plants 19 23

PERIODICAL: Tr. Mosk. energ. in-ta, 1958, No. 30, pp. 186-201

TEXT: In nuclear power plants with steam turbine installations and an intermediate heat carrier the fuel component of the electric power cost makes up 2.5-19%, the expenses of the initial charging of nuclear fuel included. If the latter is excluded, the most economical mean temperature of heat supply in the steam cycle, at which the maximum electric power of the plant can be achieved, is equal to the square root from the product of the maximum admissible temperature of heat yielding elements and the temperature in the turbine condenser. In the presence of regenerative water preheating in the steam cycle a higher temperature, determined by the formula derived, is substituted for the temperature in the con-

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YASTRZHEMSKIY, Andrey Stanislavovich; KALAFATI, D.D., retsenzent;  
KVITKOVSKAYA, Ye.A., red.; LARIONOV, G.Ye., tekhn.red.

[Thermodynamics in engineering] Tekhnicheskaja termodinamika,  
Izd.8., dop. i perer. Moskva, Gos.energ.izd-vo, 1960. 494 p.  
(MIRA 14:2)

(Thermodynamics) (Thermochemistry)

21/1200

68842

S/096/60/000/04/016/021  
E194/E455

AUTHOR: Kalafati, D.D., Candidate of Technical Sciences  
TITLE: The Optimum Temperature of Regenerative Water-Heating in  
Atomic Power Stations

PERIODICAL: Teploenergetika, 1960, Nr 4, pp 74-81 (USSR)

ABSTRACT: The optimum temperature of regenerative feed-water heating in atomic power stations is not necessarily the same as in thermal stations using the same steam conditions. There is need for a general theoretical analysis of the optimum for atomic power stations. In solving this problem it is first necessary to establish the operating conditions of the station, whether or not a water economiser is used and whether the thermal rating of the reactor is constant or depends on the regenerative feed-water temperature. The principal cases are considered in the present article. The first is that of steam generators without a water economiser. Here a change in the regenerative feed-water temperature influences the flow of secondary steam and the cycle efficiency but not the thermal output of the reactor or the heating surface. The relationship ✓

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between the cycle efficiency and the regenerative feed-water temperature is then that of Eq (1); the optimum feed water temperature for maximum efficiency is given by Eq (2). These formulae have been published previously elsewhere; the method of using them is explained employing the data for various atomic power stations, including American, given in Table 1. If a water economiser is used under given initial steam conditions, an alteration in the regenerative feed-water temperature alters the water temperature at the inlet to the reactor. Consequently the thermal rating of the reactor alters if the flow of heat transfer medium is constant. If the thermal component of the power cost is low, the best feed-water temperature is that which gives the maximum electrical output of the station; this is expressed by Eq (3). Formulae (14) and (22) are then derived for the optimum regenerative feed-water temperature; one gives the maximum electrical output and the other the minimum cost of electrical

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power. The various secondary relationships are derived and Fig 3 relates the optimum regenerative-feed water temperature to the number of turbine tappings and type of reactor. Fig 4 illustrates changes in the electrical and thermal ratings of the installation as functions of regenerative feed-water temperature. For installations with an economiser and where the thermal output of the reactor is constant, the regenerative feed-water temperature is determined from the heat-balance equations of the economiser and the steam generator as a function of the initial steam conditions at the turbine stop-valve. Therefore, the initial steam conditions and the regenerative heating temperature should be selected simultaneously to give the station the maximum efficiency. There are 7 figures, 2 tables and 12 references, 11 of which are Soviet and 1 English.

ASSOCIATION: Moskovskiy energeticheskiy institut (Moscow Power Institute)

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SOV/89-8-1-1/29

where  $T_r^{\lim}$  is limiting temperature of the casing  
 $T_o^{\lim}$  or of the center  $T_c^{\lim}$  of the heat-generating ele-  
ments of the reactor;  $T_2$  cycle is condenser tempera-  
ture;  $z = \eta_t c_T$  ( $\eta_t$  is thermal efficiency of the cycle,  
 $c_T$ , fuel component of the cost). For small values of  
 $c_T$ , Eq. (1) takes the shape of:

$$T_{\text{opt. mean}} = \sqrt{T_r^{\lim} T_{\text{2 cycle}}}^{\circ\text{K}} \quad (2)$$

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$$N_E = Q_r \eta_{st}^{br} - \Delta N_{SN} = k_r n k_r F_r \omega (T_r^{\lim} - T_1^{\text{mean cycle}}) x$$

$$x = 1 - \frac{T_2^{\text{cycle}}}{T_1^{\text{mean cycle}}} \eta_{oi} \eta_M \eta_G - \Delta N_{SN} \quad (4)$$

where  $\eta_{oi} \eta_M \eta_G$  is product of respective efficiencies,  
 i.e., the relative internal, mechanical, and generator  
 efficiency;  $\Delta N_{SN}$  is the self-need in power of the  
 station. Figures 1 and 2 represent the case when  
 $T_1^{\text{opt. mean cycle}}$  obtained from the maximum condition on  
 $N_E$  lies in region II.

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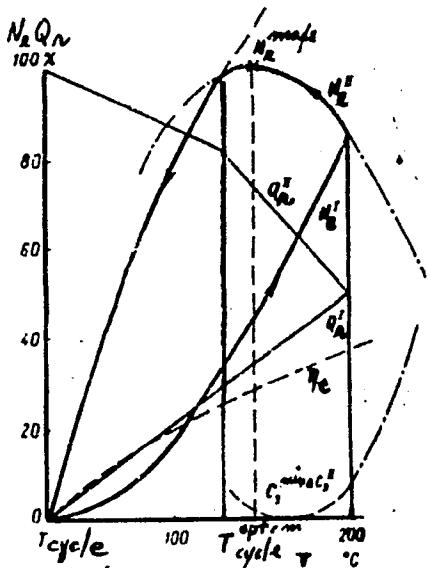


Fig. 2. Dependence of thermal and electrical power of a reactor from  
 $T^{opt, mean}$  in region II of  
 $T_1$  cycle

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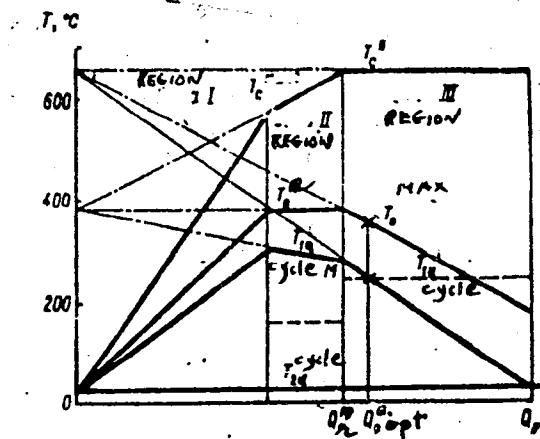


Fig. 3. Possible temperature variations in nuclear energy producing device with  $T_{mean}^{opt}$  in region III.  
 $T_{mean}^{opt}$  in region III.

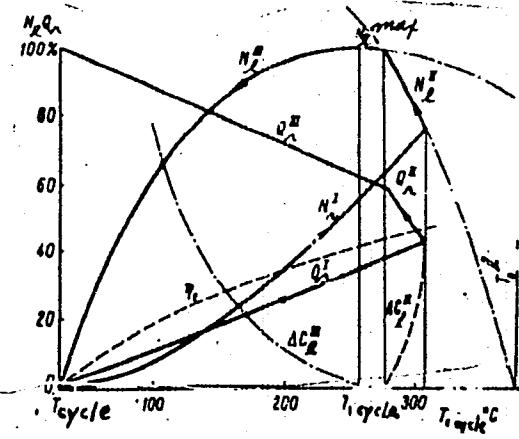


Fig. 4. Dependence of thermal and electrical power of a reactor from  $T_{mean}^{opt}$  in region III of 1 cycle. Card 8/16

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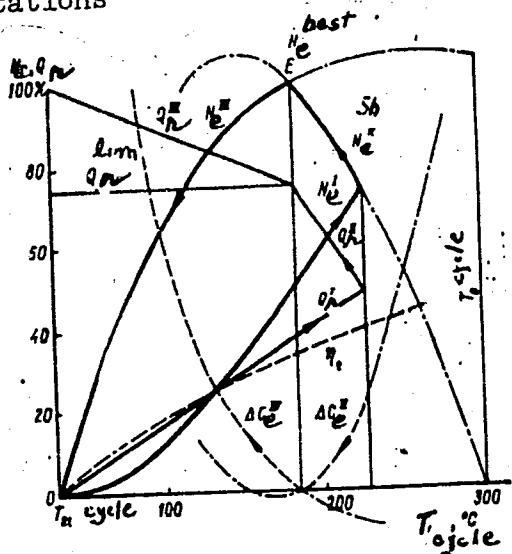


Fig. 6. Functional dependence of thermal and electrical power of reactors on  $T_r$  mean near reactor 1 cycle thermal boundary limit power  $Q_r^{\lim}$ .

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thermodynamic excellency is the energy efficiency:

$$\eta_{sg}^{en} = \frac{AL_t^{\text{cycle}}}{AL_t^{\text{rev}}} = \frac{\eta_t^{\text{cycle}}}{\eta_t^{\text{rev}}} = \frac{(T_{1 \text{ cycle}}^{\text{mean}} - T_{2 \text{ cycle}})}{(T_T^{\text{mean}} - T_{2 \text{ cycle}})} \frac{T_T^{\text{mean}}}{T_{1 \text{ cycle}}^{\text{mean}}} \quad (7)$$

where  $AL_t^{\text{cycle}}$  is work of the ideal steam cycle  
(Fig. 7);  $AL_t^{\text{rev}}$  is largest available potential work  
of heat supplied by heat transfer, equivalent to the  
work of the reversible cycle abcda.

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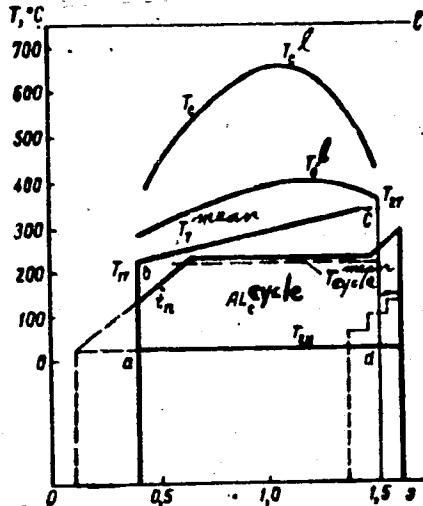


Fig. 7. Loss of work capability  
of heat during an irreversible  
heat transfer in steam generator.

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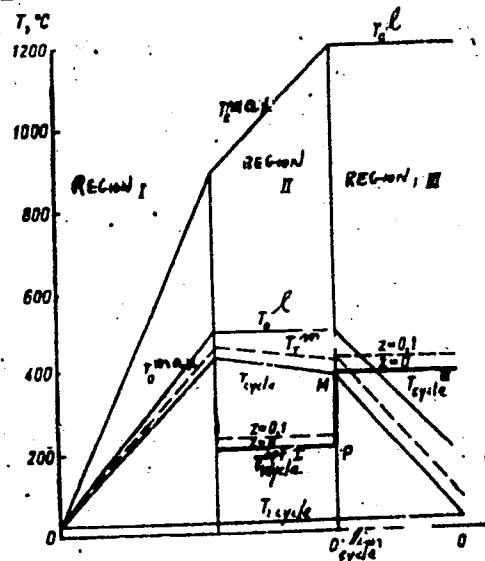
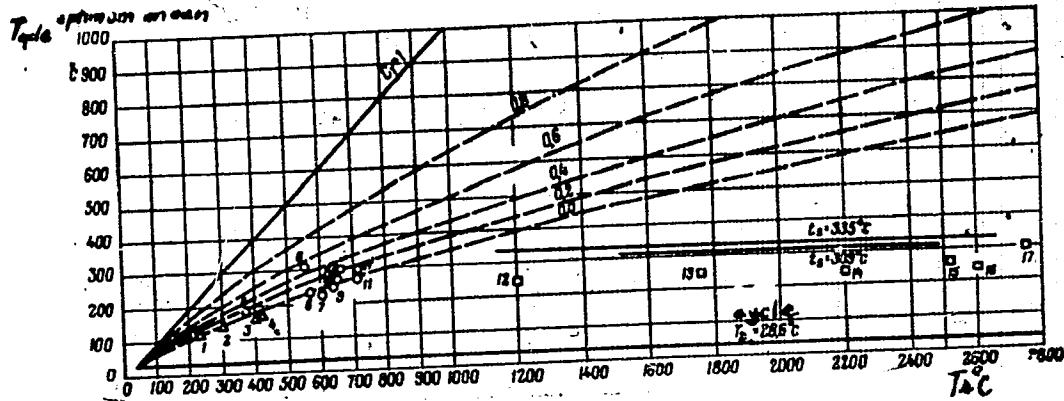


Fig. 8. Line of optimal mean conditions for  $T_1^{\text{opt}}$  cycle of atomic electric power plants.

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Figure 9 represents a comparison of theoretical and experimental values of  $T_1^{\text{mean}}$  cycle for different existing or projected plants. Points 1-4 agree with the equation based on  $T_0^{\text{lim}}$ , and 5-11, with that using  $T_c^{\text{lim}}$ . Points 12-17 represent plants working at the boundary limit of the thermal power of the reactors. The author points out that one could introduce other kinds of temperature restrictions, which would require special analysis. There is 1 table; 9 figures; and 9 Soviet references.

SUBMITTED: November 18, 1958

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S/096/61/000/001/011/014  
E194/E184

AUTHOR: Kalafati, D.D., Candidate of Technical Sciences  
TITLE: Phase Transition in the Super-Critical Region and the Inversion Curve

PERIODICAL: Teploenergetika, 1961, No. 1, pp. 72-78

TEXT: This article is concerned almost exclusively with theoretical thermodynamics. In the super-critical region phase transition between liquid and gas is associated with changes in structure of the substance, but differs from the sub-critical region in that the transition is continuous and takes place over a certain temperature range at constant pressure. Steam is usually studied in the super-critical region from near the critical point to pressures of two to three times the critical; a wider range of state may be considered in combined analysis of the effects of phase transition and of the inversion curve which covers the region of nine to twelve times the critical pressure. The conditions of phase transition in the super-critical region are discussed with reference to the work of previous authors. The line of maximum values of specific heat and constant pressure on isobars is then

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E194/E184

Phase Transition in the Super-Critical Region and the Inversion Curve

considered and published work is reviewed. The inversion curve of real gases and the line of maxima of the partial differential coefficient of volume with respect to temperature at constant pressure is discussed. On the basis of Eqs (8) and (14) a table is drawn up of the parameters of maxima of the specific heat at constant pressure on isobars and of the partial differential coefficient of volume with respect to temperature at constant pressure for steam. Finally, a combined analysis is made of the phase transition line and the inversion curve.

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There are 5 figures, 1 table and 20 references: 16 Soviet and 4 non-Soviet.

ASSOCIATION: Moskovskiy energeticheskiy institut  
(Moscow Power Engineering Institute)

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S/096/61/000/006/002/006  
E194/E155.

21.1920

AUTHOR: Kalafati, D.D., Candidate of Technical Sciences

TITLE: Thermodynamic analysis of heat exchange conditions in the steam generators of atomic power stations

PERIODICAL: Teploenergetika, 1961, No.6, pp. 16-20

TEXT: In atomic power station design correct selection of the temperature drop between the heat transfer medium and the steam is most important. In determining optimum temperature drops in a steam generator, there are two main cases: in the first the thermal output of the reactor may be altered by changing the parameters of the heat transfer medium; in the second the thermal output of the reactor and the parameters of the heat transfer medium are given and it is only possible to alter the parameters and efficiency of the cycle. The first of these two cases is considered first. Expressions are written down for the optimum mean temperature of heat supply to the cycle which gives minimum cost of electric power. Power cost equations are derived from previous work and the following expression is given for the cost of electric power:

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Thermodynamic analysis of heat exchange. E194/E155

$$c_s = \frac{\Sigma + \frac{bQ_r}{k_{nr}(T_r^{cp} - T_{in}^{cp})} + BQ_r}{Q_r \eta_{cr}^n}, \quad (6)$$

where  $c_s$  is the cost of electric power;  $\Sigma$  is the amount of costs that are proportional to time, such as capital charges, depreciation, labour costs and others, per hour operation of the station. It is assumed that the cost of the steam generator is proportional to its heating surface and that the costs of all the other sets in the station remain practically constant; then the costs  $\Sigma$  are divided into constant  $\Sigma'$  and variable parts.

$$\Sigma = \Sigma' + bF_{nr} \quad (3)$$

where  $b$  is the amount of capital costs, depreciation and other expenditure proportional to time per square metre of steam generator surface  $F_{nr}$ , where  $F_{nr} =$

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S/096/61/000/006/002/006

Thermodynamic analysis of heat exchange..E194/E155

$$F_{nr} = \frac{Q_T}{k_{nr} \Delta t_{nr}^{cp}} \quad (4)$$

where  $k_{nr}$  is the heat transfer coefficient of the steam generator and  $\Delta t_{nr}^{cp}$  is the mean temperature drop in the steam generator.

Then, using the notation

$$\chi_{nr}^K = \frac{b F_{nr}}{\sum} \quad (13) \quad X$$

the following expression is derived for the optimum mean temperature drop:

$$\Delta t_{nr}^{\text{opt.cp}} = \chi_{nr}^K (T_0^{np} - T_{lu}^{cp}) \quad (15)$$

This expression indicates the effect of altering the thermal output of the reactor. If the output can correspond to a temperature intermediate between the maximum temperature at the centre of the heating elements  $T_0^{np}$  and the mean temperature of delivery of heat to the cycle  $T_{lu}^{cp}$ , then the fraction of the temperature

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Thermodynamic analysis of heat exchange...E194/E155

this value. The second case, that of constant reactor thermal output, is then considered. This means that limiting fixed temperatures are chosen for the centre and the outside of the heating elements. Hence the temperature drop in the steam generator can be increased or its heating surface reduced only by reducing the parameters of the thermodynamic cycles. By comparing the change of steam generator cost with the change in overall efficiency of the installation it is possible to determine the economically optimum temperature drop in the steam generator. With these conditions Eq... (6) gives  $Q_T = \text{const}$  and  $T_{CP}^T = \text{const}$  and  $T_{CP}^L = \text{var}$  and  $\eta_t = \text{var}$ . Replacing the expression for the thermal efficiency by the temperature we obtain:

$$\frac{\Sigma + \frac{bQ_r}{k_{nr}(T_r^{CP} - T_{in}^{CP})} + bQ_r}{Q_r \left( 1 - \frac{T_{2u}}{T_{in}^{CP}} \right) \eta_0 \eta_{in} \eta_r \eta_{eu}} \quad (16)$$

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S/096/01/000/006/002/006

Thermodynamic analysis of heat exchange...E194/E155

Again the minimum cost is obtained by differentiating and equating to zero, and the following expression is obtained:

$$\Delta t_{\text{opt, cp}} = a T_{\text{LH}}^{\text{cp}} \quad (20)$$

where  $a$  is obtained from

$$a^2 = \frac{b}{k_{\text{ch}} T_{\text{2}} \text{c}_{\text{min}}^{\text{cp}} \eta_{\text{oi}} \eta_{\text{M}} \eta_{\text{CH}}} \quad (19)$$

Or, expressing  $T_{\text{LH}}^{\text{cp}}$  in terms of  $T_{\text{T}}^{\text{cp}}$  the following expression is obtained:

$$\Delta t_{\text{opt, cp}} = \frac{a}{1+a} T_{\text{T}}^{\text{cp}} \quad (21)$$

A worked numerical example is then given. It is pointed out that formula (20) is very similar to one derived by Lundgren and Zeyppel' (Ref.5). The formulae are analysed somewhat further to find the relationship between the proportion of the cost due to the steam generator and the temperature drop in it, when  $Q_{\text{T}} = \text{const.}$  The optimum mean temperature drop in the steam

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S/096/61/000/006/002/006

Thermodynamic analysis of heat exchange... El94/El55

generator is found to equal the available difference between the mean temperature at which heat is delivered to and removed from the cycle, multiplied by the ratio of these absolute temperatures and the proportion of the cost due to the steam generator in the total cost of the power station. The relationship is expressed as:

$$\Delta t_{\text{opt. cp}} = \chi_{\text{cp}}^c \frac{T_{1U}^{\text{cp}}}{T_{2U}^{\text{cp}}} (T_{1U}^{\text{cp}} - T_{2U}^{\text{cp}}) \quad (26)$$

Other applications of these formulae are considered, such as that of determining whether a given temperature drop in a steam generator is the optimum value. When super-heated steam is used the analytical investigations are more complicated. However, the results obtained make it possible to assess the value of the optimum temperature drop in the steam generator of an atomic power station as a function of the ratio of the cost of the steam generator to that of the total cost of the station.

There are 2 figures and 6 references (Soviet but 3 presumably translated from English or German).

ASSOCIATION: Moskovskiy energeticheskiy institut  
Card 7/7 (Moscow Power Engineering Institute)

KALAFATI, D.D., kand.tekhn.nauk, dotsent

The 250th anniversary of the birth of Mikhail Vasil'evich Lomonosov.  
Izv. vys. ucheb. zav.; energ. 4 no.11:1-4 N '61. (MIRA 14:12)

1. Moskovskiy ordena Lenina energeticheskiy institut.  
(Lomonosov, Mikhail Vasil'evich, 1711-1765)

KALAFATI, D.D.

Thermodynamic cycles of atomic power stations. Atom.energ. 10  
no.6:623-624 Je '61. (MIR 14:6)  
(Nuclear engineering)

VUKALOVICH, Mikhail Petrovich; NOVIKOV, Ivan Ivanovich; KALAFATI,  
D.D., dots., kand. tekhn.nauk, retsenzent; SILETSKIY, V.S.,  
red.; BORUNOV, N.I., tekhn. red.

[Technical thermodynamics] Tekhnicheskaya termodinamika. Izd. 3  
perer. i dop. Pod red. M.P.Vukalovicha. Moskva, Gosenergoizdat,  
1962. 304 p. (MIRA 15:7)

(Thermodynamics)

MURAV'YEV, M.G., dots., kand. tekhn. nauk; LIAFATI, D.B., kand. tekhn. nauk, dots., retsenzent; SHON, V.G., kand. fiz.-mat. nauk, dots., retsenzent; NEKHAY, V.T., red.

[Using the deduction method in investigating basic thermo-dynamic processes] Issledovanie osnovnykh termodinamicheskikh protsessov deduktivnym metodom. Minsk, Izd-vo "Vysshiaia shkola," 1963. 57 p. (MIRA 17:6)

KALAFATI, D.D., kand.tekhn.nauk, dotsent

Presentation of the original text of I.I.Polzunov's "Report notes";  
200th anniversary of the presentation of his project "Steam powered  
machines." Izv. vys. ucheb. zav.; energ. 6 no.4:54-58 Ap '63.  
(MIRA 16:5)

1. Moskovskiy ordena Lenina energeticheskiy institut.  
(Steam engines)  
(Polzunov, I.I.)

PHASE I BOOK EXPLOITATION

SOV/6453

Kalafati, Dmitriy Dmitrievich

Termodinamicheskiye tsikly atomnykh elektrostantsiy (Thermodynamic Cycles of Atomic Power Stations) Moscow, Gosenergizdat, 1963. 279 p. 5500 copies printed.

Ed.: Yu.I.Koryakin; Tech. Ed.: G.Larionov.

PURPOSE: This book is intended for scientific and engineering personnel in atomic power engineering, and for students of power engineering in schools of higher education.

COVERAGE: The book presents the theory of thermodynamic cycles of atomic power plants. Discussed are operating conditions, economics, and parameter selection. Optimal initial parameters of cycles, mean temperature drop in steam generators and condensers, temperature in regenerative water heating, secondary steam superheating, and power consumption for coolant circulation are analyzed. Thermodynamic cycles of atomic power plants with various reactors

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Thermodynamic Cycles (Cont.)

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are considered. No personalities are mentioned. The author thanks S.A.Skvortsov, O.D.Kazachkovskiy, Yu.Ye.Bagdasarov, I.A.Kuznetsov, N.A.Dollezhal', and T.Kh.Margulova. There are 92 references: 87 Soviet (1 translation, numerous others based on Western sources), 4 English, and 1 unidentified.

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4. Purpose of thermodynamic analysis of atomic power-plant cycles	33

Card 2/2

KALAFATI, I.D., doktor tekhn. nauk

Analysis of methods for calculating the adiabatic process of  
gas mixing using tables and diagrams. Izv. vys. ucheb. zav.  
energ. 8 no.8:52-57 Ag '65. (MIRA 18:9)

1. Moskovskiy ordena Lenina energeticheskiy institut.  
Predstavлено кафедрой теоретических основ теплотехники.

cy due to losses in the mixing stage. It is shown that even for relatively higher ther-

ACC NR: AP6021219

mal efficiency, the electrical efficiency remains low. It is suggested that multi-stage mixing or employment of a two-component working fluid should lead to more efficient MHD generators. Orig. art. has: 6 figures, 6 formulas.

SUB CODE: 20/ SUBM DATE: 18Jun65/ ORIG REF: 002/ OTH REF: 004

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SOV/44-58-4-2917

Translation from: Referativnyy zhurnal, Matematika, 1958,  
Nr 4, p 63 (USSR)

AUTHOR: Kalafati, I.D.

TITLE: On the Algebra of Green Functions (K algebre funktsiy  
Grina)

PERIODICAL: Tr. Nikolayevskogo korablestroit. in-ta, 1956, Nr 8,  
pp 228-245

ABSTRACT: A solution is given for the important problem con-  
cerning the boundary value problems for quasi-differential  
operators of the form

$$\mathcal{L}[y] = \mathcal{S}_0 \frac{d}{dx} \mathcal{S}_1 \frac{d}{dx} y, \dots, \mathcal{S}_{n-1} \frac{d}{dx} \mathcal{S}_n y.$$

A study is made of two Green Functions  $K(x, s)$  and  $H(x, s)$  for  
the operator  $\mathcal{L}[y]$ , which correspond to various systems of  
boundary conditions. Each system of boundary conditions is  
represented by  $n$  linearly independent relations between  $2n$   
values on the ends of the interval of function  $y$  and its

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On the Algebra of Green Functions

quasi-derivatives up to the  $n-1^{th}$  order inclusively.

Expressions are formulated for the Fredholm symbols and the resolvent of the kernel  $H(\xi)$  by means of the Fredholm symbols and the resolvent of the kernel  $K(\xi)$ . The expressions derived are used in the study of the oscillatory properties of Greene functions.

F.R. Gantmakher

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KALAFATI, L. V.

Regularities in the distribution of pegmatites in the southwestern Kola Peninsula based on stratigraphic correlation of the White Sea series. Vop. geol. i min. Kol'. poluos. no.2:38-57 '60.

(Kola Peninsula—Pegmatites)

(MIRA 13:10)

SUBJECT

USSR/MATHEMATICS/Theory of functions  
KALAFATI P.D.

CARD 1/1

PG ~ 160

AUTHOR

TITLE

PERIODICAL

On a new orthogonal system of functions.  
Doklady Akad. Nauk 105, 631-633 (1955)  
reviewed 7/1956

Let be given the system

$$(1) \quad y'' - v(x)y + \lambda^2 y = 0$$

$$(2) \quad y'(0) - hy(0) = y(1) = 0,$$

where  $v(x)$  ( $0 \leq x \leq 1$ ) is a real function which is integrable on  $(0, 1)$  and  $h$  is a real constant. Let all characteristic numbers  $\lambda_k^2$  ( $k=1, 2, \dots$ ) be positive and  $\lambda_k > 0$  and  $\lambda_{-k} = -\lambda_k$ .  $\varphi(x; \lambda^2)$  ( $\varphi(0; \lambda^2) = 1$ ;  $\varphi'(0; \lambda^2) = h$ ) be the solution of (1). The author proves that the functions

$$\chi_k(x) = \left[ \varphi(x; \lambda_k^2) + \frac{i}{\lambda_k} \varphi(x; 0) \frac{d}{dx} \frac{\varphi(x; \lambda_k^2)}{\varphi(x; 0)} \right] e^{-ix\lambda_k}$$

form a complete orthogonal system in the interval  $(0, 1)$ . This investigation completes the considerations of Krejn (Doklady Akad. Nauk 94, (1954) No. 1).

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35513  
S/020/62/143/003/004/029  
B112/B102AUTHOR: Kalafati, P. D.

TITLE: Oscillation properties of the fundamental functions of third-order boundary value problems

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 143, no. 3, 1962, 518-521

TEXT: The author considers the boundary value problem  $D_3y - \lambda py = 0$ ,  
 $(\alpha_{i1}D_0y + \alpha_{i2}D_1y + \alpha_{i3}D_2y)|_{x=0} + (\beta_{i1}D_0y + \beta_{i2}D_1y + \beta_{i3}D_2y)|_{x=1} = 0$ ,  
where  $D_0y = \rho_3(x)y(x)$ ,

$$D_1y = \rho_2(x)d\rho_3(x)y(x)/dx,$$

$$D_2y = \rho_1(x)d(\rho_2(x)d\rho_3(x)y(x)/dx)/dx,$$

$$D_3y = \rho_0(x)d(\rho_1(x)d(\rho_2(x)d\rho_3(x)y(x)/dx)/dx)/dx.$$

The kernel  $K(s)$  of the integral equation  $y(x) = \lambda \int_0^1 K(s)y(s)d\sigma(s)$  that is equivalent to the equation  $D_3y - \lambda py = 0$  is said to be of the oscillation  
Card 1/3

KALAFATIC, Zrnka

Incotinentia pigmenti. Radovi med. fakr. Zagrebu. Vol. 2:126-131  
1954.

1. Iz Pedijatricke klinike Medicinskog fakulteta u Zagrebu  
(predstojnik: prof. dr. Niko Skrivanelli.)  
(PIGMENTATION  
incontinentia pigmenti)

KALAFATIC Z.

SIRIVANELI, N., dr.; ERAK, P., dr.; KALAFATIC, Z., dr.; POTKONJAK, M., dr.

Clinical aspects, pathogenesis and therapy of acute poliomyelitis.  
Lijec. vjes. 76 no.5-6:195-208 1954.

1. Iz Djecje klinika Medicinskog fakulteta u Zagrebu.  
(POLIOMYELITIS, etiol. & pathogen.)

VALECIC, Antun, Dr.; KALAFATIC, Zrnka, Dr.; PRPIC, Ivan, Dr.; VLATKOVIC, Gojko, Dr.

Treatment of retained tests in children. Lijec vjes 82 no.9/10:  
763-768 '60.

1. Iz Kirurske klinike i Klinike za djecje bolesti Medicinskog  
fakulteta Sveucilista u Zagrebu.  
(CRYPTORCHISM surg)

KALAFATIC, Zrnka; JURETIC, Miro; BALOG, Nevenka

Ellis-Van Creveld syndrome. Rad. med. fak. Zagreb 8 no.1:39-48 '60;  
(ABNORMALITIES case reports)

ZVEREV, M., inzhener; KALAFATOV, P., inzhener.

Narrow-range loading units. Mast. ugl. 5 no.9:24-25 S '56.  
(Coal mining machinery) (MIRA 9:10)

~~SIMONOV, Aleksey Lavrent'yevich; KALAFATOV, P.I.~~  
SIMONOV, Aleksey Lavrent'yevich; ~~KALAFATOV, P.I.~~, otv.red.; LYUBIMOV, N.G.,  
red.izd-va; NADEINSKAYA, A.A., tekhn.red.

[Repair of cutting machinery] Remont zaboimykh mashin. Moskva,  
Ugletekhnizdat, 1957. 143 p. (MIRA 11:3)  
(Coal mining machinery--Maintenance and repair)

KALAFATOV, P.I.

To research, plan, produce and introduce working systems, machinery  
and equipment for manless coal mining. Ugol' Ukr. 3 no.7:48 Jl. '59.  
(MIRA 12-11)  
(Ukraine--Coal mines and mining) (Automotion)

KALAFATOVIC, D.

Izmene i dopune prosenih normi u gradjevinarstvu izdanja 1952 godine (Changes of  
and Supplements to Average Standards in the Building Industry, 1952 Edition); a book review  
p. 1102

TEHNIKA, Beograd, Vol 10, No. 10, 1955

SO: EEAL, Vol 5, No 7, July 1956

KALAFATOVIC, D.

What should a plan for site organization include? p. 1661

TEHNIKA, Vol 10, No. 11, 1955  
Beograd,

SO: EEAL, Vol 5, No. 7, July 1956

KALAFATOVIC, D.

Mechanized plastering. p. 1004e. TEHNIKA (Savaz inzenjera  
i tehnicara Jugoslavije) Beograd. Vol. 11, no. 7,  
1956.

SOURCE: East Europe Accessions Lists (EEAL),  
Library of Congress, Vol. 5, no. 11, Nov. 1956

KALAFATOVIC, D.

Productivity in the building industry. p. 649.  
(Tehnika, Vol. 12, no. 4, 1957. Beograd, Yugoslavia)

SO: Monthly List of East European Accessions. (EEAL) LC. Vol. 6, No. 7.  
July 1957. Uncl.

KALAFATOVIC, D.

The international conference for the scientific organization of work in the building industry in Rotterdam. p. 665.  
(Tehnika, Vol. 12, no. 4, 1957. Beograd, Yugoslavia)

SO: Monthly List of East European Accessions. (EEAL) LC, Vol. 6, No. 7,  
July 1957. Uncl.

KALAFALOVIC, D.

Measurement of productivity in the construction industry; the method with the index of value and the method with the natural index. p. 1409.

(TEHNIKA. Vol. 12, No. 8, 1957, Beograd, Yugoslavia)

SO: Monthly List of East European Accessions (EEAL) Lc. Vol. 6, No. 10, October 1957. Uncl.

KALAFATOVIC, D.

Regularity of the fluctuation of labor productivity; labor productivity curve.

p. 1741 (Tehnika) Vol. 12, no. 10, 1957, Belgrade, Yugoslavia

SO: MONTHLY INDEX OF EAST EUROPEAN ACCESSIONS (EEAI) LC, VOL. 7, NO. 1, JAN. 1958

Kalafatovic, D.

Comparative results of housing construction; registration and the exchange of experiences in housing construction. p. 1639.

Tehniks. Beograd, Yugoslavia. Vol. 14, no. 9, Sept. 1959

Monthly List of East European Accessions (EEAI) LC Vol. 9, no. 2, Feb. 1960

Uncl.

KALAFATOVIC, Dragas, ing. (Beograd, Cvijiceva 130)

Management in general; with a special regard to management in building industries. Tehnika Jug 16 no.12:2253-2258 '61.

1. Visi savetnik u Saveznoj gradevinskoj komori; clan redakcionog odbora "Organizacija rada".

KALAFATOVIC, Dragas, inz. (Beograd, Cvijiceva 130)

The dwelling building sites for demonstration purposes.  
Tehnika Jug 17 no.11:Suppl.: Građevinarstvo 16 no.11:2061-2064  
N '62.

1. Visi savetnik Savezne privredne komore, Beograd.

KALAFATOVIC, Dragas, inz. (Beograd, Cvijiceva 30)

Structure of industrialized method in building. Tekhnika Jug  
17 no.12: Supple: Gradevinarstvo 16 no.12:2257-2261 D '62.

1. Visi savetnik Savezne privredne komore, Beograd.

KALAFATOVIC, Dragas, inz. (Beograd, Cvijiceva 130)

Present state and trends in the development of housing. Tehnika  
Jug 18 no.9:Suppl.: Građevinarstvo 17 no.9:1633-1636 S '63.

l. Savetnik u Savetu za građevinarstvo Savezne privredne komore,  
Beograd.

KALAFATOVIC, Dragas, inz.

Shortening of worktime, a battle for increased productivity.  
Tehnika Jug 18 no.9:Suppl.: Organizacija rada 13 no.9:1769  
S '63.

1. Visi savetnik Savezne gradevinske komore, Beograd, clan  
Redakcionog odbora, ["Tehnika"], Supplement: "Organizacija  
rada".

KALAFATOVIC, Dragas, inz. (Beograd, Cvijiceva 130)

Current trends in the organization of house building. Tehnika Jug  
18 no.11; Suppl. Organizacija rada 13 no.11:2138-2140 N '63.

1. Savetnik u Savetu za gradevinarstvo Savezne privredne komore,  
Beograd.

KALAFATOVIC, Dragas, inz. (Beograd, Cvijiceva 130)

Organization of preparations for the introduction of shorter working time in the building industry. Tehnika Jug 18 no. 12:  
Supplement: Organizacija rada 13 no. 12: 2338-2343 D '63

1. Savetnik u Savezu za gradevinarstvo Savezne privredne komore, Beograd.

KALAFUT, Frantisek

Changes in the volume of the cell nucleus under the influence of  
clearing media. Biologia 17 no.1:40-45 '62.

1. Oddelenie experimentalnej cytologie Ustavu experimentalnej mediciny  
Slovenskej akademie vied v Bratislave.

(CELL NUCLEUS anat & histol) (CYTOLOGY)

KALAFUT, Frantisek; KOSA, Michal

Microcinematographic apparatus for recording the activity of live  
cells cultivated in vitro. Biologia 17 no.9:685-690 '62.

1. Ustav experimentalnej mediciny Slovenskej akademie vied, Oddelenie  
experimentalnej cytologie v Bratislave.  
(TISSUE CULTURE) (MOTION PICTURES)

KOSA, M., inz.; KALAFUT, F., promovany biolog

Equipment for microcinematography, and some construction problems.  
Jemna mechan opt 9 no.5:135-138 My '64.

1. UEM, Slovak Academy of Sciences, Bratislava.

STANEK, Ivan; KALAFUT, Frantisek

Microcinematographic analysis of the death of free phagocytizing cells in cultures of embryonal fowl spleen and brain.  
Biologia 19 no.1:3-15 '64.

1. Institut fur experimentelle Medizin der Slowakischen Akademie der Wissenschaften, Abteilung fur experimentelle Zytologie.

MUNGYEROVA, G.; BAHUSIKOVA, O.; KALAFUT, E.; JACZ, K.

The effect of some cytostatics on multiform glioblastomas in tissue cultures. Neoplasma (Bratisl) 12 no.3:289-295 '65.

i. Department of Experimental Cytology, Institute of Experimental Medicine of Slovak Academy of Sciences, Department of Neurosurgery, Regional National Health Institute, Bratislava, Czechoslovakia.

KALAFUT, Frantisek

Effect of light factors on the vital staining of glial macro-phages in vitro. Biologia (Bratisl.) 20 no.11:883-886 '65.

1. Oddelenie experimentalnej cytologie Ustavu normalnej a patologickej fyziologie Slovenskej akademie vied v Bratislave.

L 33501-66

ACC NR: AP6023511

SOURCE CODE: CZ/0049/65/000/011/0883/0886

Q2

B

AUTHOR: Kalafut, F. (Graduate biologist; Bratislava)

ORG: Department of Experimental Cytology, Institute for Normal and Pathological Physiology, SAV, Bratislava (Oddelenie experimentalnej cytologie Ustavu normalnej a patologickej fyziologie SAV)

TITLE: Influence of light factors upon the vital dyeing of gliomacrophages in vitro

22

SOURCE: Biologia, no. 11, 1965, 883-886

TOPIC TAGS: animal, light biologic effect, cytology, toluidine, tryptophan, chemical dye

ABSTRACT: A simultaneous influence of light and of the vital dyes causes faster damage and dyeing of the colored cells than occurs when the dyed cells are maintained in the dark. The cells used were chicken embryo cells; the dyes neutral red, toluidine, and tryptophane blue. Orig. art. has: 4 figures. [JPRS]

SUB CODE: 06 / SUBM DATE: none / ORIG REF: 004 / SOV REF: 001  
OTH REF: 005

Card 1/1 80

0915

14715

CZECHOSLOVAKIA/Chemical Technology. Chemical Products and  
Their Application. Artificial and Synthetic  
Fibers.

Abs Jour: Ref Zhur-Khim., No 13, 1958, 45278

Author : Kalafut St., Slivovsky L.

Inst :

Title : Heterogeneity of Technical Solutions of Cellulose  
Xanthogenates.

Orig Pub: Chem. prumysl, 1957, 7, No 8, 453-456

Abstract: Description of the procedure for following the  
process of maturation of technical viscose solu-  
tions by determining their coagulation capacity.  
A method is described for a fractional separa-  
tion of cellulose xanthogenate from technical  
viscose by precipitation with methanol. For

Card : 1/2

55

COUNTRY	:	CZECHOSLOVAKIA	H
CATEGORY	:	Chemical Technology. Chemical Products and Their Applications. Artificial and Synthetic*	
ABS. JOUR.	:	RZKhim., No. 23 1959, No. 84284	
AUTHOR	:	Kalafut, S.; Slivovsky, L.	
INST.	:	-	
TITLE	:	Effects of Zinc Sulfate and of Triethanolamine on Shaving of the Viscose Fibers.	
ORIG. PUB.	:	Chem. prumysl, 1959, 9, No 2, 104-108	
ABSTRACT	:	Effects of zinc sulfate (I) and of triethanolamine (II) on the quality of viscose fibers was investigated. It was established that II increases the diffusion of H <sub>2</sub> SO <sub>4</sub> (III) into the interior of fibers. Homogeneous fibers (cross-sectionally) are being formed in a weaving bath containing (in gr/l) 52-120 of I, 10 of II and 100-120 of III. Strongest fibers are obtained with the weaving bath filled with 90 g/l of III (while the rate of weaving is	
<p style="text-align: center;">*Fibers.</p>			
CARD:	:	1/2	

Z/009/61/000/008/003/005  
E112/E153

The effect of modifiers on viscose ...

passage of zinc ahead of acid. The viscose-making process converts the cellulose raw material into the alkali-soluble sodium cellulose xanthate. Upon extrusion into the acid bath this salt is converted into the cellulose xanthic acid and sodium sulphate. It is the primary object of this paper to investigate the effects of sodium sulphate upon the solubility characteristics of two typical modifiers, namely polyethylene glycols and N-methylcyclohexylamine under neutral, alkaline and acidic conditions. It is proposed that sodium sulphate acts as a salting-out agent on both modifiers, promoting their separation as fine precipitates on the fibre surface and retarding the diffusion of sulphuric acid. The retarding of the overall regeneration process results in the spinning filament being in a plastic and stretchable state for a considerably longer period of time than in the normal spinning process. The authors have also established that a subsequent treatment with zinc ions of fibres which were coagulated in absence of zinc sulphate failed to retard gel formation or neutralisation times. Cross-sections of the fibres were inhomogeneous, even if modified viscose was used. Details of experimental procedure are

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Z/009/61/000/008/003/005

The effect of modifiers on viscose... E112/E153

given as follows. 1) The solubility of the main types of modifiers in presence of  $\text{Na}_2\text{SO}_4$  was determined under neutral, alkaline and acid conditions. 2) Main types of modifiers were reacted with  $\text{CS}_2$  and solubilities of reaction products were determined in presence of  $\text{Na}_2\text{SO}_4$ , as under 1). 3) A number of the recommended modifiers with different solubilities in presence of salts were compared in their retarding action on gel formation, and cross-sectional photomicrographs were prepared. 4) Primary and secondary diffusion rates of zinc ions were determined. Results were assessed generally by determining the D-values of the regenerated fibre according to procedure described in B.P. 762772. The following tables are submitted: 1) Solubilities of different modifiers in presence of  $\text{Na}_2\text{SO}_4$  under neutral, alkaline and acid conditions; 2) Effect of zinc ions on modified viscose on first contact of the zinc bath with the forming fibre; and 3) Effects of zinc ions on modified viscose on secondary contact of fibre with the zinc bath. Cross-sections of fibres after use and without use of modifiers are shown. (Solophenyl Bluegreen BL was used to dye the cross-sections.) There are 6 figures, 3 tables and 7 references: 5 English, 1 German and 1 Swedish.

Card 3/4

The effect of modifiers on viscose... Z/009/61/000/008/003/005  
E112/E153

ASSOCIATION: Výskumný ústav chemických vláken, Svit (Research Institute for Synthetic Fibres, Svit)

SUBMITTED: February 13, 1961

The four most recent English language references read:

Ref.1: Text. Res. J. 1959/I.32

Ref.4: Austr. patent 209 820, 209 821

Ref.6: BP 652 741, 652 746, 654 083, 741 727, 741 728, 762 772.

Ref.7: USP 2 515 834, 2 515 889.

Card 4/4

S/081/62/000/024/046/052  
B134/B102

AUTHORS: Kalafut, Štefan, Kolesář, Jozef

TITLE: Method for the preparation of a braid from twisted viscose fiber

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 24(II), 1962, 956-957;  
abstract 24P1055 (Czechosl. pat. 100509, August 15, 1961;  
[addition to pat. no. 97566 (RZhKhim, 1962, 20P503)])

TEXT: The non-twisted braid is inserted, wet or dry, into a jar with a minimum diameter of 15 cm (better, 25 cm), and after filling with the fiber of dry weight 0.5 - 3 kg (better, 1.5 kg) the braid is withdrawn, desulfurized, and dressed. Example: Viscose, containing 8.5%  $\alpha$ -cellulose and 6% NaOH, with a viscosity of 40 sec. and the value  $\gamma_{cs2}$  38, is spun at 50°C from a spinneret with 480 apertures 0.06 mm in diam. into the coagulation tank, which contains 90 g/l  $H_2SO_4$ , 10 g/l zinc sulfate and 260 g/l  $Na_2SO_4$ . The total titer of the fiber is 1000 denier. The braid is stretched to 60% in a plastification tank with the usual composition.

Card 1/2

KALAGA, R.; PILAEKI, E.

Production of springs by the Katowice Railroad Rolling Stock Repair Shops.  
p. 122.

PRZEGLAD KOLEJOWY MECHANICZNY. Warsaw, Poland, Vol. 10, no. 4, Apr. 1958.

Monthly List of East European Accessions (EEAI), LC, Vol. 8, no. 9, September, 1959.  
Uncl.

KALAGASTOV, V. G. Cand. Physicomath. Sci.

Dissertation: "Investigation of Matrices with Nonnegative Elements." Moscow  
State Pedagogical Inst. imeni V. I. Lenin, 14 Apr. 1947

SO: Vechernyaya Moskva, Apr. 1947 (Project #17836)

KALAGAYEV, A.I., starshiy elektronekhanik.

Standardized locking rod for electric locks. Avtom., telem. i  
sviaz' 2 no.11:23-24 N '58. (MIRA 11:12)

1. Buyskaya distantsiya signalizatsii i svyazi Severnoy doregi.  
(Railroads--Switches)

KALAGOVA, M. A., Cand Med Sci -- (diss) "Treatment of hypertonic sickness with sleeping pills and conditioned-reflex sleep." Krasnodar, 1960. 17 pp; (Ministry of Public Health RSFSR, Kuban State Medical Inst im Red Army); 210 copies; price not given; (KL, 18-60, 156)

KALAIKZHIEV, A.; TENOV, R.; MARKOVA, E.

Inorganic elementary composition of some known kinds of fruits and vegetables. Izv biol med BAN 3 no.3:111-122 '59. (EEAI 10:4)

1. Institut po eksperimentalna meditsina pri BAN (Direktor: akad. D.Orakhovats)  
(FRUIT)  
(VEGETABLES)

KALайдzhiev, A.; DRAGANOV, Z.

The volt-ampere characteristics of the polarographic cell with imposed current and tension. Izv. inst. fiziol. (Sofiiia) 6: 279-284 '63.

(POLAROGRAPHY)

KALAIZHIEV, A. T.

KHADZHILOV, A. I. KALAIZHIEV, A. T., BOICHEVA, E. A.

Microscopic method in the determination of erythrocyte sedimentation time. Izv. med. inst., Sofia 1:138-142 1951. (CIML 21:3)

1. Morphology Section (Head --Corresponding Member A. Khadzhilov) of the Institute of Experimental Medicine of the Academy of Sciences (Director — Academician N. Orakhovats) and the Department of Histology and Embryology of V. Chervenkov Medical Academy (Head -- A. Khadzhilov).

KALAIIDJIEV, A.T.

On the tension of chemical energy of some biochemical substances  
and systems. Doklady Bolg. akad. nauk 6 no.2:37-40 Apr-June 53.

1. Institut of morphology of the Bulgarian Academy of Science.  
(BIOCHEMISTRY,  
tension of chem. energy of biochem. substances & systems)

KALAIIDZHIEV, A.T.

KHADZHIOLOV, A.I.; BOIADZHIEV, G.I.; DOKOV, V.K.; KALAIIDZHIEV, A.T.  
Morphology of vitelline globules. Doklady Bolg. akad. nauk 6 no.2:  
45-47 Apr-June 53

1. Institut morfologii Bolgarskoy Akademii nauk.  
(EMBRYO,  
vitelline globules in pigeon egg)

HORAK, F.; KALAMAR, J.; MELNIKOVA, N.

Preparation of new p-ethoxyphenylthiourea derivatives, Cesk. farm.  
11 no.2:80-81 F '62.

1. Katedra organickéj technologie, chemicka fakulty SVST, Bratislava.  
(THIOUREA rel cpds)

KALAYDZHIYEV, A.T.

Influence of some chemical substances on the respiratory enzymes of bacteria  
Kalyazhev and G. D. Bochev. (USSR).—  
Zh. fiz.-khim. 37, No. 2, 45-54 (1963) (in English).—  
The influence of the following of the yeast are shown for a  
extreme, KCN, isobutyric acid, and temperature.  
results indicate that an increase in temperature  
oxidative enzyme systems which are present  
higher level of chain energy, and vice versa.

Kataldijev A. T.

The relation of cyanide-resistant respiratory enzymes to  
molecular and peroxide oxygen. A. T. Kataldijev and  
G. D. Dechev. *Compt. rend. acad. bulgare sci.*, No. 3,  
61-4(1954)(Pub. 1955)(in English).—Polarographic curves  
are presented showing the inhibition effect of  $7.7 \times 10^{-6}$   
and  $7.7 \times 10^{-4}$ M KCN on the O<sub>2</sub> and H<sub>2</sub>O<sub>2</sub> consumption of  
0.5% baker's yeast in a pH 7 phosphate buffer. When the  
hemin enzymes, oxidase and catalase, are preserved in the  
yeast, the consumption of O<sub>2</sub> and H<sub>2</sub>O<sub>2</sub> drop simultaneously  
in a ratio of 1 to 1, but when they are inhibited with KCN  
the remaining enzymes, flavines and dehydrogenases, do not form  
H<sub>2</sub>O<sub>2</sub> but consume it. With the addition of KCN the reduction  
of the oxidizing stage stops at a certain level, while the  
reduction of the peroxidizing stage continues to the end;  
the level at which the oxidizing stage ceases is determined by the  
KCN concn. and not that of the yeast. John H. Wood.

KALAIJDJIEV, A.

KALAIJDJIEV, A. Kinetic minimums of  $\frac{dt}{dt'}$  V curve at 50 Hz in suspensions  
of Baker's yeasts and animal tissues. In English. p. 63. Vol. 9, no. 1,  
Jan./Mar. 1956. DOKLADY., Sofia, Bulgaria.

SOURCE: East European Accessions List (EEAL) Vol. 6 No. 4 April 1957

KALAIIDZHIEV, A.

KALAIIDZHIEV, A., On the influence of some antipyretic substances and temperature on the respiratory ferments of Baker's yeast. In English. p. 67. vol. 9, no. 1, Jan./Mar. 1956 DOKLADY, Sofiia, Bulgaria.

SOURCE: East European Accessions List (EEAL) Vol. 6 No. 4 April 1957

KALAIIDZHIEV, A.

"Methods for the study of ferment transformations in albuminous systems."

IZVESTIIA. SERIIA EKSPERIMENTALNA BIOLOGIIA I MEDITSINA, Sofia, Bulgaria,  
No. 2, 1957.

Monthly List of East European Accessions Index (EEAI), The Library of  
Congress, Volume 8, No. 8, August 1959.

Unclassified

COUNTRY : BULGARIA V  
CATEGORY : Pharmacology and Toxicology. Medicinal Plants  
APS. JOUR. : RZhBiol., No. 1 1959, No. 4600  
AUTHOR : Panayotov, P.; Kalaydzhiyev, A.; G"l"bov, S.  
INST. :  
TITLE : Experiments for Studying the Action of Infusions  
of Teucrium chamaedrys in vitro Upon the Micro-  
organisms Most Frequently Encountered in Diseases  
of the Digestive Tract  
ORIG. PUB. : Farmatsiya (B"lg.), 1957, 7; No.4, 30-32  
ABSTRACT : The action of 5% infusion of sprouts of Teucrium  
chamaedrys upon *Bacillus coli*, *Proteus*, pathogens  
of dysentery, typhoid fever and paratyphoids,  
and upon *Staphylococcus aureus* was investigated  
experimentally. The bacteriostatic action was  
evaluated according to halo diameters by using  
the diffusion method. In the cultures of dysen-  
tery bacilli the halo diameters measured 2-12 mm,  
in paratyphoid cultures 3-5 mm and in typhoid  
cultures 1 mm. To explain the mechanism of bacte-

CARD:

1/2

BULGARIA/Human and Animal Physiology - Metabolism.

Abs Jour : Ref Zhur Biol., No 3, 1959, 12442

Author : Kalajdschiev, A., Waltschewa, L., Stefanova, L.

Inst : Bulgarian AS

Title : Interaction of Purified Catalase and Protease in  
Respect to the Mechanism of the Stimulatory Process

Orig Pub : Dokl. Bolg. AN, 1957, 10, No 5, 395-397

Abstract : Mixtures of preparations of purified catalase and bacterial protease were incubated in a special incubator which had been contrived to give 14 different temperatures at the same time. With 90-minute incubation at temperature ranges of 22 - 63 degrees protease produced a decrease in catalase activity. The obtained results were considered proof of the fact that proteolytic enzymes can regulate the course of oxidizing processes

Card 1/2

VLUCHKOV, Petko, inzh.; KALAIZHIEV, Boris, inzh.

Application of direct current models for investigating the electric  
systems. Tekhnika Bulg. no.8:7-9 '61.

(Electric lines)

MARKOFF, M. [deceased]; HADJIOLOV, A.I.; OBRETENOVA, K.; KALAIIDJIEV, V.;  
MIHAILOVA, A.

On the serological and cellular-tissue changes during the  
infections and immunatory-processes caused by *Salmonella*  
*typhi murium*. Dokl. Bolg. akad. nauk 16 no.7:769-772 '63

KALAIIDZHIEV, G.

"District Conference on Pavlov's Teaching." p. 3,  
(ZDRAVEN FRONT, No. 49, Dec. 1954, Sofiya, Bulgaria)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4  
No. 5, May 1955, Uncl.

KALAIIDZHIEV, I.

"New Juicy Forage", P. 27. (KOOPERATIVNO ZEMEDELIE, VOL. 10, NO. 3,  
Mar. 1955, Sofiya, Bulgaria)

SO: (Monthly List of East European Accessions, (EEAL), LC, Vol. 4,  
No. 6, June 1955, Uncl.

Kalaydzhiyev

Bulgaria/General Division. History. Classics. Personalities. A-2

Abs Jour : Ref Zhur-Biologiya, No 2, 1958, 4627

Author : Kalaydzhiyev and Stefanova

Inst :

Title : The Scientific Heritage of Aleksey Nikolayevich Bakht (on the 100th Anniversary of his Birth)

Orig Pub : Priroda (Bulg.), 1957, 6, No 2, 88-90

Abstract : No abstract

Card 1/1

BULGARIA/Farm Animals - Cattle

Abs Jour : Ref Zhur - Biol., No 15, 1958, 69291

Author : Kalaydzhiyev, I., Nikolayev, K.

Inst : Ministry of Agriculture and Forestry

Title : Problem of Ensiling Tobacco Stems

Orig Pub : Nauchni tr. M-vo zemed. i gorite. Ser. "zhivotnov"dstvo  
i vet. delo, 1957, 2, No 2, 19-26

Abstract : In ensiling tobacco stems in a mixture with corn, a good silage was obtained containing 2.18% of lactic acid and pH 4.1 in the absence of butyric acid. In a fresh silage, the nicotine content reached 0.020-0.025% and in dry substance, it attained 0.10-0.11%. Cows fed 15 kg daily of this silage during 40 days remained healthy, preserved appetite, and did not show symptoms of disturbance of the nervous system; besides,

Card 1/2

- 29 -

KALAYDZHIYEV 1.

BULGARIA/General Biology - Genetics. Plant Genetics.

B.

Abs Jour : Ref Zhur - Biol., No 21, 1958, 94690

Author : Kurnishov, Nikolaj; Kalaydzhiev, Ivan

Inst : -  
Title : New Method of Obtaining Vegetative Hybrids Between the Sunflower and Girasole.

Orig Pub : Selskostop. misyl, 1957, 2, No 9, 563-564

Abstract : A new method is proposed of grafting the sunflower on the girasole. Lightly-bound girasole tubers are taken as rootstock, and young sunflower plants with cotyledons which had just turned green serve as the scion. In one of the tips which affected the growth of the root buds, a puncture was made with a depth of 1-1.5 cm by means of a nail orawl with a thickness which corresponds to the thickness of the scion's stemlet. In the sprout which serves as the scion, the root system is removed and from the lower part of the stem 1-1.5 cm above the cut the

Card 1/2

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Country : BULGARIA  
Category: Cultivated Plants. Fodders.

Abs Jour: RZhBiol., No 22, 1958, No 100353

Author : Kalaydzhiyev, Ivan

Inst :

Title : Fodder Pumpkins

Orig Pub: Kooperat. zemledeliye, 1958, No 3, 26-27

Abstract: No abstract.

Card : 1/1

M-98

KALAIIDZHIEV, V.,; DURVAROV, P.

TECHNOLOGY

Periodical: KHOIDROTEKHNIKA I MELIORATSII. Vol. 3, No. 5, 1958.

KALAIIDZHIEV, V.; DURVAROV, P. Anchor-propless strengthening in building tunnels. p. 140.

Monthly List of East European Accession (EEAI), LC., Vol. 8, No. 2  
February 1959, Unclass.

KALAIIDZHEVA, S.; KALAIIDZHEVA, I.

During June in the fields. p.20. KOOPERATIVNO ZEMEDELIE.  
(Ministerstvo no zemedelieta) Sofiia. Vol. 11, no. 6,  
June 1956

SOURCE: East European Accessions List, (EEAL), Library of  
Congress, Vol. 5, no. 12, December 1956